Amendments to the Claims

This listing of claims will replace all prior version, listings, of claims in the specification:

<u>Listing of Claims:</u>

1. (original) An oligonucleotide array comprising a surface and a plurality of oligonucleotides, wherein at least one oligonucleotide has at least one modified sugar moiety.

2. (original) An oligonucleotide array according to claim 1, wherein the 2'-OH group of the sugar moiety is substituted.

3. (original) An oligonucleotide array according to claim 2, wherein the sugar moiety comprises at the 2'- position: F; O-, S-, or N-alkyl; O-, S-, or N-alkenyl; O-, S- or N-alkynyl; or O-alkyl-O-alkyl, wherein the alkyl, alkenyl and alkynyl may be substituted or unsubstituted C_1 to C_{10} alkyl or C_2 to C_{10} alkenyl and alkynyl, alkoxyalkyl, C_1 to C_{10} lower alkyl, substituted C_1 to C_{10} lower alkyl, alkaryl, aralkyl, O-alkaryl or O-aralkyl, SH, SCH_3, Cl, Br, CN, CF_3, OCF_3, $SOCH_3$, $SO_2 CH_3$, ONO_2, NO_2, N_3, NH_2, heterocycloalkyl, heterocycloalkaryl, aminoalkylamino, polyalkylamino.

4. (original) An oligonucleotide array according to any of the previous claims wherein the sugar moiety comprises a 2'-MOE, 2'-DMAOE, 2'-methoxy or 2'-aminopropoxy.

5. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotides have a length of about 15 to 50 nucleotides.

6. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotides comprise at least 10 modified sugar moieties.

7. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotide array comprise at least 50% oligonucleotides with modified sugar moieties.

8. (original) An oligonucleotide array according to any of the previous claims wherein said oligonucleotide array comprises oligonucleotides which specifically hybridize to short mammalian RNAs.

9. (original) The oligonucleotide array of claim 8, wherein said oligonucleotides specifically hybridize to short human RNAs.

10. (original) An oligonucleotide array according to any of the previous claims wherein said oligonucleotide array is comprehensive for the detection of small RNAs of a given organ, tissue or cell of an organism.

11. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotides are noncovalently attached to the surface.

12. (original) An oligonucleotide array according to any of the previous claims, wherein said oligonucleotide array comprises oligonucleotides with one or more deoxyribonucleotides.

13. (original) An oligonucleotide array according to any of the previous claims, wherein the oligonucleotide array can be used on an evanescent wave sensor platform.

14. (currently amended) A method for the detection of short RNAs comprising the steps of (a) providing a biological sample, wherein said sample comprises short RNAs; (b) contacting said sample with an oligonucleotide array according to any of claims 1 to 13 claim 1; (c) performing a hybridization reaction between the short endogenous RNAs and the oligonucleotides in the array.

15. (currently amended) A method to correlate a biological sample to a biological condition comprising (a) providing a biological sample, wherein said sample comprises short RNAs; (b) contacting said sample with an oligonucleotide array according to any of claims 1 to 13 claim 1, wherein said array comprises a set of predefined sequences suitable for the detection of short RNAs; (c) comparing the hybridization pattern obtained with a standard hybridization pattern.

16. (currently amended) A method according to claim 14 or 15 claim 14, wherein said short RNAs are micro RNAs (miRNAs).

17. (currently amended) A method according to claim 15 or 16 claim 15 wherein the biological sample is correlated to a health state.

18. (currently amended) A method for the prognosis or diagnosis of a diseases comprising (a) providing a biological sample, (b) contacting an oligonucleotide array according to any of claims 1 to 13 claim 1 corresponding to a set of defined sequences useful for the detection of short RNAs, (c) obtaining a hybridization pattern, (d) comparing said hybridization pattern to a standard hybridization pattern, wherein the presence or absence of a certain pattern is indicative of a likelihood to develop a disease or of the presence of a disease.

19. (original) A method according to claim 18, wherein the biological sample is from a human.

20. (currently amended) A method according to ~~claim 18 or 19~~ <u>claim 18</u>, wherein the disease is cancer, a neurodegenerative disease or an infectious disease.